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Remarks/Arguments:

Reconsideration of the application is requested.

Claims 1, 3-13, and 15-28 remain in the application. Claims 2 and 14 were previously cancelled. Claims 15, 16, 27, and 28 have been withdrawn from consideration.

In item 2 on page 2 of the above-identified Office action, claims 1, 4-6, and 8 have been rejected as being fully anticipated by Wang (U.S. Patent No. 6,841,317 B2) under 35 U.S.C. § 102.

In item 2 on page 2 of the above-identified Office action, claims 1, 4-6, and 8 have been rejected as being fully anticipated by Kalk (U.S. Patent No. 6,841,312 B1) under 35 U.S.C. § 102.

In item 2 on page 2 of the above-identified Office action, claims 1 and 4-8 have been rejected as being fully anticipated by Shiraski (U.S. Patent No. 6,593,034 B1) under 35 U.S.C. § 102.

In item 2 on page 2 of the above-identified Office action, claims 1 and 4-8 have been rejected as being fully anticipated by Matsuoka et al. (U.S. Patent No. 6,436,586 B1) (hereinafter "Matsuoka") under 35 U.S.C. § 102.

In item 2 on page 2 of the above-identified Office action, claims 1, 4-6, and 8 have been rejected as being fully anticipated by Nakagawa et al. (U.S. Patent No. 6,083,577) (hereinafter "Nakagawa") under 35 U.S.C. § 102.

In item 2 on page 2 of the above-identified Office action, claims 1 and 4-8 have been rejected as fully anticipated by Hamada et al. (U.S. Patent No. 5,723,860) (hereinafter "Hamada") under 35 U.S.C. § 102.

In item 3 on page 4 of the Office action, claims 13 and 18-23 have been rejected as being fully anticipated by any one of Wang (U.S. Patent No. 6,841,317 B2), Kalk (U.S. Patent No. 6,841,312 B1), Shiraski (U.S. Patent No. 6,593,034 B1), Matsuoka (U.S. Patent No. 6,436,586 B1), Nakagawa (U.S. Patent No. 6,083,577), and Hamada (U.S. Patent No. 5,723,860) under 35 U.S.C. § 102.

As will be explained below, it is believed that the claims were patentable over the cited art in their original form and the claims have, therefore, not been amended to overcome the references.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claims 1 and 13 call for, *inter alia*:

> the polymer cushion being formed of a polymer having at least one of a viscosity and an adhesiveness that is greater when tensile forces are exerted on the protective device orthogonally in relation to the peripheral region of the lithographic reflection mask than when shearing forces are exerted on the protective device parallel to the peripheral region.

On page 3 of the Office action, the Examiner alleges that "the similarity of the polymer cushion of the prior art as well as applicants' claimed invention being pressure sensitive adhesive (PSA) would direct one of ordinary skill in the art to understand that both the PSA of applicants and the prior at would both have at least one inherent similar property of a viscosity or an adhesiveness, the at least one property being greater when tensile forces are exerted on the protective device orthogonally in relation to the peripheral region of the plate-shaped object than when shearing forces are exerted on the protective device parallel to the peripheral region of the plate-shaped object."

Applicants respectfully disagree. More specifically, it is noted that MPEP § 2112 IV requires that the Examiner must provide ration-ale or evidence tending to show inherency. Particularly, it is required that "to establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is **necessarily present** in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted). Here, the Examiner has not provided any extrinsic evidence that it necessarily present in the adhesives of the prior art that the property is greater when tensile forces are applied than when shearing forces are applied. Accordingly, it is respectfully noted that the Examiner has not met the requirements of MPEP 2112 IV. Therefore, it is respectfully noted that the Examiner's allegations pertaining to "inherent" properties, are not accurate.

Even though it is believed that the Examiner has not shown that the prior art inherently discloses the properties of the polymer cushion required by the claims of the instant application, the following further remarks are given.

In the final Office action, the Examiner essentially repeats the allegations made in the first Office Action. In item 8, on page 6 of the Office action, the Examiner demands that applicants prove that the anisotropical characteristics of viscosity and/or adhesiveness are not a feature of the PSA and similar adhesive found in the prior art.

Before providing this evidence, applicants would first like to explain the predominant feature of the present invention to the Examiner. According to the present invention, a polymer cushion has anisotropic viscosity and/or anisotropic adhesiveness that is used for fixing the frame of the protective device (pellicle frame) to the lithographic reflection mask (reticle). Please note that the explicit wording "anisotropic" used herein is only used for explanation (the present argument is supported by the present claim wording). The feature of at least one "anisotropic" material property is claimed in the last paragraph of claim 1, according to which the polymer has "at least one property selected from the group consisting of a viscosity and the adhesiveness being greater when tensile forces are exerted on the protective device orthogonally in relation to the peripheral region of the lithographic reflection mask than when shearing forces are exerted on the protective device parallel to the peripheral region of the lithographic reflection mask." Accordingly, the anisotropic viscosity and/or adhesiveness is greater in a direction orthogonal to the mask surface than in direction parallel to the mask surface. Due to this feature, the pellicle frame is easier to remove from the reticle mask by a rotational or lateral movement than by orthogonally pulling the pellicle frame from the mask surface.

As for providing evidence that the prior art does not have anisotropic material properties, please note that the abbreviation "PSA" (for 'pressure sensitive adhesive') simply characterizes materials which, upon slight pressure, begin to adhere to any surface against which they are slightly pressed. For example, any usual adhesive tape like "TESA" (registered trademark) or other adhesive tape includes such PSA materials which are provided on at least on surface of a carrier strip to be removably pressed on another object. The term "pressure sensitive adhesive" expresses that, upon slight pressure being applied, the material begins to adhere to the respective object. Of course, PSA materials may also be used separately from a carrier strip (though is it commonly preferred to apply these materials on a carrier strip for easier use).

The pressure-sensitive adhesiveness of any PSA material is a well-known property commonly exploited, PSA materials normally do not have any anisotropical (that is a directional) viscosity and/or adhesiveness. Instead, like in any other material amorphous material the PSA materials usually are isotropic (in particular, regarding viscosity and adhesiveness). The technical reason for isotropic (rather than anisotropic) properties is that, on a molecular scale, the molecules are arranged and oriented statistically such that no preferred direction of molecule orientation exists. Any anisotropical material property requires a predefined global orientation of the molecules constituting the PSA material. However, in amorphous materials no predefined direction or molecule orientation can exist for statistical reasons. Therefore, the strength of the adhesiveness and viscosity of a PSA material are isotropic.

Accordingly, an anisotropic viscosity or adhesiveness is not a feature of the PSA and similar adhesives employed in the prior art. Moreover, the feature that the adhesiveness or viscosity which is larger in orthogonal direction than in tangential direction (shearing) to the substrate (as claimed in the last paragraph of claim 1) is contrary to the PSA and similar adhesives of the prior art, because usually the adhesiveness is larger in tangential direction (shearing) than in orthogonal direction. This is apparent from the common experience that it is easier to tear off an adhesive strip orthogonally from a substrate surface than in direction tangential to the substrate surface (which requires extremely large shear forces to be applied). However, the present invention calls for the use of an anisotropic adhesive, which can be easily removed from the substrate surface by a **tangential (rotational or lateral) movement**.

As seen from the above given remarks, the references cited in item 2 of the Office action, do not show the polymer cushion being formed of a polymer having at least one of a viscosity and an adhesiveness that is greater when tensile forces are exerted on the protective device orthogonally in relation to the peripheral region of the lithographic reflection mask than when shearing forces are exerted on the protective device parallel to the peripheral region, as recited in claims 1 and 13 of the instant application.

In item 5 on page 5 of the Office action, claims 3 and 17 have been rejected as being obvious over any one of Wang (U.S. Patent No. 6,841,317 B2), Kalk (U.S. Patent No. 6,841,312 B1), Shiraski (U.S. Patent No. 6,593,034 B1), Matsuoka (U.S. Patent

No. 6,436,586 B1), Nakagawa (U.S. Patent No. 6,083,577), and Hamada (U.S. Patent No. 5,723,860) under 35 U.S.C. § 103. Since claims 1 and 13 are believed to be allowable, dependent claims 3 and 17 are believed to be allowable as well.

In item 6 on page 5 of the Office action, claims 9, 11, 23, and 25 have been rejected as being obvious over any one of Wang (U.S. Patent No. 6,841,317 B2), Kalk (U.S. Patent No. 6,841,312 B1), Shiraski (U.S. Patent No. 6,593,034 B1), Matsuoka (U.S. Patent No. 6,436,586 B1), Nakagawa (U.S. Patent No. 6,083,577), and Hamada (U.S. Patent No. 5,723,860) in view of Yamauchi (U.S. Patent No. 5,353,934) under 35 U.S.C. § 103. Yamauchi does not make up for the deficiencies of Wang, Kalk, Shiraski, Matsuoka, Nakagawa, and Hamada. Since claims 1 and 13 are believed to be allowable over, dependent claims 9, 11, 23, and 25 are believed to be allowable as well.

In item 14 on page 6 of the Office action, claims 10 and 24 have been rejected as being obvious over Wang (U.S. Patent No. 6,841,317 B2), Kalk (U.S. Patent No. 6,841,312 B1), Shiraski (U.S. Patent No. 6,593,034 B1), Matsuoka (U.S. Patent No. 6,436,586 B1), Nakagawa (U.S. Patent No. 6,083,577), and Hamada (U.S. Patent No. 5,723,860) in view of Yamauchi (U.S. Patent No. 5,353,934) and further in view of Ramamoorthy et al. (U.S. Patent No. 6,646,720 B2) (hereinafter "Ramamoorthy") under 35 U.S.C. § 103. Ramamoorthy does not make up for the deficiencies of Wang, Kalk, Shiraski, Matsuoka, Nakagawa, Yamauchi, and Hamada.. Since claims 1 and 13 are believed to be allowable, dependent claims 10 and 24 are believed to be allowable as well.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claims 1 or 13. Claims 1 and 13 are, therefore, believed to be patentable over the art and since all of the dependent claims are ultimately dependent on claims 1 or 13, they are believed to be patentable as well.

In view of the foregoing, reconsideration and allowance of claims 1-28 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel respectfully requests a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made.

Please charge any other fees which might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner Greenberg Stemer LLP, No. 12-1099.

Respectfully submitted,

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For Applicant(s)

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